HERPETOLOGIA

THE AMPHIBIANS AND REPTILES OF THE COLOMBIAN CARIBBEAN ISLANDS SAN ANDRES AND PROVIDENCIA

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In connection with a study of Central America I have examined specimens from many of the islands off the coast, and I here set down a list of those I have seen from two Colombian islands which rise from deep water about 200 km. east of Nicaragua. They are about 100 km. apart. Both represent old volcanic peaks, and it is unlikely that they were ever connected to each other or to the mainland, although they may have been much larger during a lower glacial sealevel.

The herpetological fauna of San Andrés and Providencia consists of: a frog, known from both islands; six lizards, three from both islands and three from Providencia; four snakes, one from San Andrés and three from Providencia.

Leptodactylus bolivianus Boulenger 1898. Both islands. On the mainland this frog occurs from the Panama Canal Zone to Venezuela.

Aristelliger sp. Providencia. The specimen was unfortunately lost in the mail before it could be checked with other species. Geckoes of this genus occur in the Bahamas, Hispaniola, Jamaica, the Caymans, and have been taken at coastal localities from Yucatán to British Honduras. One was once reported from Greytown, Nicaragua, but the specimen is lost and none have been taken in Nicaragua in the last eighty years.

Anolis concolor Cope 1862 (*Anolis pinchoti* Cochran 1931). A small lizard abundant on both islands. The type of *pinchoti* was from Providencia. On the mainland it is known only from eastern Nicaragua.

Ctenosaura similis (Gray) 1831. Both islands. Specimens from Providencia were described by Barbour and Shreve (1934) as a color race, *C. s. multipunctata*. Those from San Andrés were considered to be somewhat intermediate but nearer *C. s. similis* of the mainland, which ranges from Southern Mexico to the Panama Canal Zone.

Ameiva panchlora Barbour 1921. Providencia. This endemic lizard is closely related to the mainland *Ameiva ameiva*. It is more like *A. a. ameiva*, the race east of the Andes, than *A. a. praesignis*, which ranges north to Panama.

Cnemidophorus lemniscatus lemniscatus (Linné) 1758. (*Cnemidophorus espeuti* Boulenger 1885). Very common on both islands. On the mainland it ranges from Guatemala south to Brazil. *C. espeuti* was described from Providencia.

Mabuya pergravis Barbour 1921. Endemic on Providencia. Closely alied to *Mabuya mabouya*, which occurs on most of the Antilles and from Mexico to Brazil.

Leptotyphlops magnamaculata Taylor 1940. Providencia. This snake was described from Utilla Island, off the north coast of Honduras. It also has been taken on Swan Island, much further out to sea off the same coast. It is almost equally allied to *L. goudotii* of Colombia and Panama and to *L. phenops* of Tehuantepec.

Constrictor constrictor imperator (Daudin) 1803. Two specimens from Providencia. It ranges from Mexico to Colombia.

Coniophanes fissidens andresensis Bailey 1937. This name was based on a single specimen from San Andrés. The mainland form, *C. f. fissidens*, ranges from Mexico to Colombia.

Micrurus nigrocinctus ssp. A single specimen of coral snake from Providencia was lost in the mail. The species is common in Central America.

This slim fauna of eleven species affords a number of problems. *Leptodactylus, Ctenosaura,* and *Constrictor* are large enough to have been brought in by man for food, but in that case why are there no *Iguana,* which are common on Swan Island? The *Leptodactylus* could not have been brought in from further north, nor the *Ctenosaura* from further south, than Panamá. By accident, men may have brought in the smaller species, but the *Ameiva* must have been brought from the south, the *Anolis* directly from Nicaragua to the west, and the *Aristelliger* almost surely from the north or east. The degree of endemism, affecting one-third of the species, is sufficient to make us consider pre-Columbian human voyageing to these island. Query, were they inhabited or visited by Indians?

On a nonhuman, flotsam and jetsam origin of the fauna, the larger forms, especially the big frog (which came not from the nearest coast but from as far away as Panamá) are difficult to account for and the fauna cannot have come from any *one* mainland fauna now in existence.

If the island fauna of San Andrés and Providencia had been received at a time so remote that the distribution of the mainland forms was very different it should exhibit more endemism than it does.

The relative proportion of lizard species (six) to species of snakes (four) and of frogs (one) is markedly different from that in any of the mainland faunas, in which frog species or snake species always outnumber lizard species. This is strong evidence against derivation by land connection with the continent.